

## **DISCLAIMER**

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## **APPLICATION OF**

**VIRGINIA NATURAL GAS, INC.**

**CASE NO. PUE960227**

**For an expedited increase in gas rates**

## **REPORT OF DEBORAH V. ELLENBERG, CHIEF HEARING EXAMINER**

**February 26, 1998**

On September 25, 1996, Virginia Natural Gas, Inc. ("VNG" or "the Company") filed an application for expedited rate relief proposing to increase its revenues by \$13,899,092 in additional gross annual operating revenues. On October 11, 1996, the Commission entered its Preliminary Order which allowed VNG's proposed tariff revisions to go into effect for service rendered on and after October 25, 1996, on an interim basis subject to refund with interest. Thereafter the Commission also established a procedural schedule for the case and assigned this case to a Hearing Examiner.

A hearing on the application was convened on April 10, 1997. Counsel appearing were: Guy T. Tripp III, Esquire, on behalf of the Company; Sherry H. Bridewell, Esquire, on behalf of the Commission Staff; Lawrence R. Herman, Esquire, and Gail D. Jaspen, Esquire, on behalf of the Insurance & Utilities Regulatory Section of the Office of Attorney General ("AG"); Alexander F. Skirpan, Jr., Esquire, and John F. Dudley, Esquire, on behalf of Anheuser-Busch Companies, Inc., Ford Motor Company, Nabisco Brands, Inc., Owens-Brockway Glass Container, Inc., and U.S. Gypsum Company (the "Industrial Protestants"); and Karen L. Bell, Esquire, on behalf of Virginia Electric and Power Company ("Virginia Power").

The required notice of the application was marked as Exhibit A and admitted into the record at the hearing. A transcript of that hearing is filed with this report.

The parties filed simultaneous briefs on June 2, 1997. On July 28, 1997, the Company filed a Motion to Reduce Interim Rates. Therein it sought to reduce the interim rates in effect by approximately \$5 million until the Commission rendered a final decision in this case. The proposal would reduce charges to customers while the case is pending and also reduce the refund liability of the Company. Staff did not oppose the motion. The AG supported the motion, but argued that the interim reduction should be made effective retroactive to October 25, 1996, with refunds made to the customers immediately. The Industrial Protestants urged the Examiner to implement VNG's requested interim reduction based on the same revenue apportionment methodology used to establish the current interim rates or to deny the motion. By Ruling dated August 22, 1997, VNG's motion to reduce rates was granted. The interim reduction was made effective with the billing month of October 1997 when the quarterly billing factor adjustment was effective, thus avoiding multiple rate changes.

## **SUMMARY OF THE RECORD**

VNG's application for an expedited increase in rates is based on a July 1, 1995, through June 30, 1996, test year. The Company requested an increase of \$13,899,092; however, by the end of the hearing in the case, the Company had accepted several of Staff's adjustments including the effect of updating the rate base and rate base related items, and the Company lowered its requested rate increase to \$8,818,320. (Ex. RDP-8, at 13). In support of its application, the Company offered the direct testimony of Jerry L. Causey, Walter R. Hunter, Robert D. Phillips, Charles F. Phillips, Jr., Leigh A. Garrett, Jeffrey L. Huston, Joseph R. Goral, Stephen R. McGreevy, and Ann W. Templeman.

Staff offered the testimony of Lynn C. Miller, Farris M. Maddox, Gail G. Frassetta, and James M. Hotinger. Four issues affecting the revenue requirement remain in controversy between the Company and Staff. Those issues are joint promotional advertising expenses; the expenses associated with certain service calls which Staff characterizes as merchandising and jobbing expenses; employee benefits, notably the level of medical, dental and life insurance expenses; and return on equity, including the use of a financial risk adjustment to VNG's cost of equity. The Staff initially recommended an increase in rates designed to produce additional revenues of \$5,241,328. That revenue requirement was based on a return on equity of 10.7%. In supplemental testimony the Staff modified its recommendation and now supports additional revenues of \$6,691,985 based on a 10.90% return of equity.

Staff recommended that VNG continue to separate revenues and costs associated with Yorktown from Schedule 9C, that VNG study developing a separate rate schedule for Yorktown for its next rate case, and that revenues and costs associated with pipeline transportation should be separated in the class cost of service in the next case. Staff further proposed minor revisions to Rate Schedules 13 and 14, recommended the Actual Cost Adjustment ("ACA") tariff language be revised to allow proper crediting of off-system revenues and expenses, recommended retention of the target margin in the Margin Sharing Adjustment ("MSA") at the current level of \$2,426,787, and supported minor language changes intended to match revenues from Schedule 8, 9 and 10 and gas costs used to derive the annual gross margin of the MSA calculation. (Ex. GGF-28, at 8, 9, 11, 17, 19-20). The Company had no objection to any of Staff's tariff changes.

Staff also addressed revenue apportionment and recommended changes to the Company's proposed allocations. Although the Company agreed with Staff's modifications, the issue remained in controversy between the Industrial Protestants and Staff.

Initially, the AG recommended adjustments to seventeen accounting items. However, by the time of the hearing the number of issues in controversy between the Company and the AG had narrowed. The AG continued to take issue with advertising expenses and certain CNG Service Company expenses. In addition, the AG challenged the Company's use of compensatory bank balances in determining the Company's cash working capital requirement. The AG also addressed cost of capital and recommended that the Commission allow the Company an opportunity to earn a 10.25% return on its equity. The AG filed written testimony that the Company needed additional revenues of approximately \$4,066,000. David J. Effron and Stephen G. Hill testified on behalf of the

AG. Mr. Effron subsequently adopted several of Staff's adjustments and revised his recommendation at the hearing to approximately \$6 million. (Tr. 129).

The Industrial Protestants addressed the proper revenue apportionment necessary to achieve parity among rate classes. They assert that Staff's apportionment violates the Commission's established policies by moving Schedule 7 further away from parity and moreover, results in rate shock to those customers. The Industrial Protestants urge the Commission to use the apportionment approved in the last case.

Virginia Power also filed a Protest in this case and entered an appearance at the hearing. Virginia Power, while expressing its interest as a customer, took no position on the issues in controversy.

In rebuttal, the Company offered the testimony of Ann R. Chamberlain who discussed the joint advertising expenses related to the Energy Efficient Homes and Quality Gas Contractors programs. Frank Corbett also defended the expenses incurred by the Company when it makes certain service calls. Mr. Hunter and Mr. Robert Phillips offered rebuttal testimony on several accounting issues. Dr. Charles Phillips addressed a reasonable cost of equity and overall cost of capital.

## **DISCUSSION**

### *1. Joint Advertising Expenses*

VNG makes contributions to the advertising programs of qualified builders and contractors. Recovery of those joint advertising costs again raised controversy in this case. VNG had booked \$102,522 of its advertising costs below the line and then, after reviewing its own programs, removed an additional \$106,166 of the expense from the test period cost of service. (Ex. LCM-22, at 14). Approximately \$774,463 test year advertising costs, however, were included in the cost of service. (Id.).

Staff proposes to eliminate \$836,597 on a jurisdictional basis. (Exs. LCM-23, Schedule A to Statement III Revised). Staff's adjustment relates to advertising costs, including that of two programs, the Energy Efficient Homes ("EEH") and Quality Gas Contractors ("QGC") programs. The EEH program advertising is designed to encourage builders to construct homes and install appliances to high energy standards. Insulation must meet stated R values and weather stripping, insulated or storm windows and doors are required. Builders must meet certain thermal efficiency criteria which increase the efficiency of all forms of energy not just the gas used in the home. No payment is made unless the home is built to energy efficiency standards that exceed normal requirements. (Ex. ARC-29, R-1). Under the EEH program, the Company will reimburse one-third to one-half of the cost of the builder's advertisements up to \$150 per home. (Tr. 253).

The QGC program provides information to heating, ventilation and air conditioning contractors and gas appliance dealers about recent developments in equipment and installation. The

QGC program is intended to educate HVAC contractors and dealers on the proper installation and repair of equipment and the availability of high efficiency equipment. There are about 25 meetings of QGC groups each year. Contractors are not required to participate in the program. VNG therefore offers to contribute to their advertising costs if they participate.

Staff witness Miller testified that the advertising for those programs does not identify the standards applicable to energy savings options nor does it inform the public on how to save. She testified that "only part of the subsidy, if any, relates to conservation or informational advertising." (Ex. LCM-22, at 14). "In almost all cases, the only information is a symbol of the natural gas flame and print which states 'Featuring energy-efficient natural gas appliances for maximum comfort and cost savings.'" (*Id.*). Although the homes may be energy efficient, Staff asserts that the advertisements primarily promote the sale of new homes or appliances which results in load growth. (Ex. LCM-23, at 4).

The AG also eliminated advertising costs, specifically \$789,000. The AG witness, David Effron, looked at the Company's three categories of advertising: informational, conservational and promotional. The Company had removed all of the expenses which it classified as promotional on its Schedule 20 from its ratemaking cost of service. The Company proposed to include all costs which it classified as informational or conservational. However, Mr. Effron testified that none of the examples the Company provided of its conservational advertising were properly classified as conservation. In his opinion, they were examples of promotional advertising since they did not provide information on how to use gas more efficiently. Rather, the advertising discussed the high efficiency and economic advantages of gas for the primary purpose of promoting the use of natural gas. He contends that the program advertising does not meet the criteria established by the Commission for recovery. First, he argues that VNG has not established that the program is reasonably calculated to promote the maximum effective conservation and use of energy and capital resources. The Company did no analysis to determine what efficiencies would be enhanced or how much would be saved. Second, he asserts that the Company did not receive prior Commission approval. Third, he argues that the programs promote load growth and the rules prohibit allowances of any type to influence the use of gas appliances. Effron specifically asserts that "the advertising does not provide any explanation of what VNG urges or suggests to utilize natural gas more efficiently or economically. . . Its primary purpose is promotional." (Ex. DJE-17, at 22).

VNG counters that only \$266,696 is associated with non-conforming advertising programs. (Ex. RDP-8, Att. R-2, Co. Adj. 13). VNG asserts that the EEH program encourages builders to install more insulation, use better duct work, improve weather stripping and provide other energy efficient features that exceed standard building code requirements, and hence promote conservation.

The Company also asserts that the QGC program promotes conservation since it promotes installation of energy efficient appliances, although VNG acknowledges that both the EEH and QGC programs are targeted at new construction. (Ex. ARC-29, at 5, 11). VNG argues that Staff's position on the disallowance of the advertising costs at issue would run counter to the Commission's rules which permit recovery of qualified advertising costs in that it would disallow any advertising that promotes the purchase of gas even though the very definition of "advertise" is "to promote a desire to buy." (VNG Brief at 6).

The parameters for recovery of advertising costs are established by statute. Virginia Code § 56-235.2 clearly provides that rates shall not include advertising costs "except for advertisements either required by law or rule or regulation, or for advertisements which solely promote the public interest, conservation or more efficient use of energy. . . ." Hence, only the cost of advertising which "solely promotes the public interest, conservation or more efficient use of energy" can be recovered in rates.

Historically the Commission generally has allowed advertising costs, but otherwise disallowed promotional allowances. Following a comprehensive investigation of conservation and load management ("CLM") initiatives, the Commission revised its rules on promotional allowances, including contributions to joint advertising programs, and further, began more carefully scrutinizing all advertising costs before allowing utilities to recover them from ratepayers. The Commission wanted to encourage cost-effective CLM programs, but avoid allowing recovery for programs that were primarily designed to increase load and market share.<sup>1</sup>

In the first of two related cases, the Commission found that some allowances can be designed to encourage CLM, and thus, can be in the public interest. Therein the Commission also observed that:

The Virginia Code prohibits rate recovery for electric utilities for advertising unless it is required by "law or rule or regulation, or for advertisements which solely promote the public interest, conservation or more efficient use of energy. . . ." Virginia Code § 56-235.2. Accordingly, the Commission has allowed reasonable levels of advertising expenses associated with CLM. Such practice will continue, but we will more closely scrutinize those costs in the context of individual rate cases, to carefully distinguish between advertising for cost effective CLM programs and those primarily designed to promote load growth which do not otherwise serve the overall public interest. State law does not currently address advertising by gas companies, but we have historically applied the same standards there.

. . . [U]tilities should not be allowed to recover excessive levels of advertising costs. However, the proper level will vary widely from company to company depending on many individual factors. It is appropriate, then, to review the proper funding level for each company in individual rate cases.

CLM Order, 1992 S.C.C. Ann. Rep. 261, 264.

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<sup>1</sup>*Commonwealth of Virginia At the relation of the State Corporation Commission Ex Parte: In re, Investigation of Conservation and Load Management Programs*, Case No. PUE900070, 1992 S.C.C. Ann. Rep. 261; 1993 S.C.C. Ann. Rep. 242 (hereinafter "CLM Order").

The rules on promotional allowances adopted in that case provide that:

I. Purpose

The purpose of these rules is to establish the conditions under which electric and gas utilities operating in Virginia may propose to recover reasonable costs associated with promotional allowances to customers. Any utility proposing a promotional allowance program shall demonstrate that such program is reasonably calculated to promote the maximum effective conservation and use of energy and capital resources in providing energy services. Promotional allowance programs shall be cost justified using appropriate cost/benefit methodologies.

II. Promotional Allowances Prohibited for Ratemaking

- A. Except as provided for under Section III, no electric or gas utility shall give or offer to give any payment, subsidy or allowance, directly or indirectly, or through a third party, to influence the installation, sale, purchase, or use of any appliance or equipment.

. . . .

III. Permitted Activities

- A. Unless otherwise specifically prohibited in writing by the Commission, the following activities are not prohibited by these rules:
- 1) Advertising by a utility in its own name, consistent with Virginia Code Section 56-235.2.
  - 2) Joint advertising with others, if the utility is prominently identified as a sponsor of the advertisement, consistent with Virginia Code Section 56-235.2.

. . . .

- B. Promotional allowance programs designed to achieve energy conservation, load reduction, or improved energy efficiency are permitted under these rules, subject to the prior approval of the Commission. Any promotional allowance program proposed under this Section shall comply with the standards contained in Section IV.

Id. at Attachment A.

As Staff observes, the rules generally prohibit payments of any kind "to influence the installation, sale, purchase or use of any appliance or equipment." The rules however also provide specific exceptions to, and thus permit, "[j]oint advertising" if the utility is identified as a sponsor and the advertising is designed to "solely promote the public interest, conservation or more efficient use of energy." The rules do not exclude joint advertising if the purpose of the program is solely to promote the public interest, conservation or energy efficiency, subject to prior approval from the Commission.

More recently, the Commission issued an order addressing standards for integrated resource planning and investments in conservation and demand side management for natural gas utilities as required by the Energy Policy Act of 1992 ("EPACT"). In declining to adopt a formal IRP process, the Commission restated its commitment to cost-effective CLM, and specifically noted that:

We also encourage utilities to focus on energy efficiency when developing their long-term strategic plans. Energy efficiency is one of the more important factors considered by consumers in making choices between electric, gas, and oil appliances and equipment. Electric and gas utilities should compete for customers by providing accurate information about the efficiencies and features of various types of HVAC equipment. A healthy competition can be facilitated by integrated resource planning techniques. However, integrated resource planning should not be used as a tool simply to market increased use of gas or electricity or indiscriminately gain market share at the expense of a competitor.<sup>2</sup>

The burden of proof, of course, falls on the Company to demonstrate that a program is in the public interest. In three rate cases immediately following implementation of tougher standards, the Commission cautioned that applicants should be guided by the new rules in developing advertising programs and preparing rate case data, and that failure to provide evidence of compliance could require future disallowance of all advertising expenses.<sup>3</sup>

In another rate case following implementation of the higher level of scrutiny, Senior Hearing Examiner Richardson concluded that expenses incurred primarily for customer information programs, such as safety, billing and payment information, and consumer handbooks clearly benefit the existing customers and are unrelated to load building programs. Thus such advertising is in the

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<sup>2</sup>*Commonwealth of Virginia, ex rel. State Corporation Commission, Ex Parte, In re: Consideration of standards for integrated resource planning and investments in conservation and demand management for natural gas utilities*, Case No. PUE940030, 1994 S.C.C. Ann. Rep. 395, 401.

<sup>3</sup>*Application of Virginia Natural Gas, Inc. For a general increase in rates*, Case No. PUE920031, 1993 S.C.C. Ann. Rep. 256; *Application of Commonwealth Gas Services Inc., For a general increase in rates*, Case No. PUE920037, 1993 S.C.C. Ann. Rep. 262; *Application of Roanoke Gas Company, For a general rate increase*, Case No. PUE930016, 1994 S.C.C. Ann. Rep. 352, 353.

public interest and should remain in a company's cost of service. He, however, recommended disallowance of certain expenses in the category of "conservational and informational" because the advertising programs were associated primarily with promoting the sale of energy efficient appliances. He acknowledged that promoting energy efficient appliances has the potential to reduce load, delay construction of new plant, and benefit ratepayers, but the company in that case failed to present any evidence whatsoever showing the advertising programs were part of a cost-effective strategy. He also noted that there was no evidence that promotion of energy efficient appliances produced a net reduction in gas usage or load for the company. "Indeed, it is just as likely that the programs at issue, even though packaged as promoting energy efficiency, have caused the gas usage and load to increase."<sup>4</sup> The Commission adopted his recommendations in its final order.<sup>5</sup>

Shortly after that case, Roanoke Gas argued that it had made several changes to its cooperative advertising which it believed would satisfy the CLM criteria. Specifically, each advertisement contained a gas flame logo combined with the corporate logo "The Valley's Choice for Comfort and Economy" and a benefits statement that "Our Homes Feature Clean, Efficient, Energy Saving Natural Gas." However, Roanoke again failed to offer any evidence on the cost-effectiveness of its cooperative advertising programs or other evidence that the programs were in the public interest. The Commission disallowed those advertising expenses.<sup>6</sup>

In VNG's last case, Case No. PUE940054, Staff excluded test period advertising expenses as nonconforming. The majority of the disallowance was related to cooperative advertising where VNG shared the cost of advertising with the builder, developer or independent dealer. There Staff took the position that the advertising promoted load growth and did not meet the requirements of the Commission's CLM decisions. The Company accepted Staff's adjustments in that case.<sup>7</sup>

In this case, VNG witness Chamberlain asserts that the "EEH and QGC joint advertising program procedures are specifically designed to comply with the Commission's CLM Order." (Ex. ARC-29, at 5). Specific efficiency requirements must be met to qualify as an EEH home. (*Id.*, Att. R-1). Ms. Chamberlain identified the program rules for advertising in the EEH program. (*Id.*, Att. R-2). Notably, the program rules require that "[t]he primary message must be energy efficiency, cost savings and comfort. Ads should state advantages for the customer in terms of increased efficiency of equipment and/or cost savings relative to natural gas usage." (*Id.*, Att. R-2 at 3). Each ad must also include the EEH program logo, "Advertising assistance from Virginia Natural Gas," and a message from a list of message options included in the rules and attached to this report as Attachment A. (*Id.*, Att. R-2 at 3).

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<sup>4</sup> *Application of Washington Gas Light Company*, Case No. PUE940031, Hearing Examiner's Report at 17-21 (May 26, 1995).

<sup>5</sup> *Application of Washington Gas Light Company*, Case No. PUE940031, 1995 S.C.C. Ann. Rep. 301.

<sup>6</sup> *Application of Roanoke Gas Company*, Case No. PUE940039, 1995 S.C.C. Ann. Rep. 304.

<sup>7</sup> *Application of Virginia Natural Gas*, Case No. PUE940054, Hearing Examiner's Report at 4 (November 20, 1995).



The Company argues that the cost benefit tests generally used to analyze demand side management programs are not applicable to advertising, particularly advertising for the programs at issue in this case. It asserts that no customers are directly involved; therefore, as a practical matter it cannot readily measure savings to the individual customer. Instead, Ms. Chamberlain presented testimony that every home built with energy saving measures represents conservation. Ms. Chamberlain attempted to calculate savings flowing from the programs in broader terms. She recognized that her calculations were subject to numerous variables and assumptions; however, she first estimated a 2,000 square foot EEH house would consume on average 45 Ccf less gas each year than one built only to minimum Model Energy Code Standards. Assuming current energy costs, total savings would be \$1,191 per home. (Ex. ARC-29, at 7). She determined that the 2,873 EEH homes built in 1996 created total savings of \$3,421,743, with a present value of \$1,568,658. (Id.).

To evaluate the QGC program, Ms. Chamberlain focused her savings analysis only on new gas furnaces. She testified that 7,071 new gas furnaces were installed in the VNG service area for jurisdictional customers in 1996. She testified that the largest appliance distributor in the Hampton Roads market, selling about 40% of the appliances sold in the market, reported that about 20% of the appliances sold in 1996 had efficiencies higher than the required minimum. That was an increase from 1995 when only 12% of the sales were for higher efficiency appliances. (Id. at 9-10). Based on that 20% saturation factor, Ms. Chamberlain estimated 1,554 of the furnaces sold in 1996 were high efficiency furnaces. VNG's minimum high efficiency standard for the QGC program is 90% compared to standard efficiency of 78%. (Id. at 10). Based on those assumptions and a 20 year life of a gas furnace, Ms. Chamberlain calculated cost savings of at least \$1,836,828 based on that improved efficiency. (Id. at 11).

Staff took the position that the analysis performed by the Company did not show a system-wide benefit and hence, was insufficient to support recovery of the advertising expenses.

There appears to be some confusion on the standard which should be applied to recovery of advertising costs. Specifically, it is unclear if recovery should be evaluated as if the advertising is a promotional allowance or cost associated with a CLM program, or costs separate and apart, governed solely by the statutory standard. Some promotional allowances are allowed if they are designed to primarily promote conservation or energy efficiency. Promotional allowances or other direct costs associated with a CLM program may be recoverable if the program is cost-effective and not primarily designed to promote load growth which does not otherwise serve the overall public interest. Advertising that is neither a promotional allowance, nor otherwise part of a CLM program, however, is governed by the strict standard set forth in the Code and will only be allowed if it is "solely" designed to promote the public interest, conservation, and more efficient use of energy. Hence, if such advertising also serves to promote load growth it cannot be recovered when the advertising is evaluated on a stand-alone basis. Here, VNG does not deny that its advertising promotes load growth; rather, the Company argues that its advertising program is designed to promote energy efficiency primarily in new construction and hence is in the public interest. If the Company only seeks recovery of advertising costs under the strict standard of the statute, it must be denied if there is any promotional aspect. Staff reviewed the ads run under the program and found a promotional aspect in all ads. Staff and the AG therefore recommend the costs associated with the ads be denied.

If, however, the costs are found to be a promotional allowance or otherwise part of a CLM program, the standard for recovery is different. Costs associated with a CLM program may be recovered if appropriate cost/benefit analyses are conducted and the results show the program in its entirety is cost-effective. Here, Ms. Chamberlain conducted an analysis in an attempt to quantify the effectiveness of the program, but she admits that the analyses specified in the Commission's CLM orders were not conducted since, in her opinion, they were not applicable to the advertising programs at issue in this case.

The rules for promotional allowances for cost-effective CLM programs do refer to and specifically allow some joint advertising. If the advertising is found to be a promotional allowance or payment designed to influence the installation of specific appliances or equipment, it can be permitted only if it is designed to achieve energy conservation, load reduction, or improved energy efficiency, subject to the prior approval of the Commission, and if it otherwise complies with the standards set forth in the rules. The rules also require a demonstration that the program is reasonably calculated to promote the maximum effective conservation and use of energy and capital resources in providing energy services. The rules specify that "the programs shall be cost justified using appropriate cost/benefit methodologies."<sup>8</sup>

Unlike past cases, VNG here has offered evidence to quantify the savings resulting from utilization of energy efficient appliances and construction of new homes to higher efficiency standards. Certainly, gas use in new homes will increase load, but Ms. Chamberlain established that failure to utilize energy efficient construction practices and appliances could have resulted in a greater increase in load. The Company's own rules for the joint advertising programs clearly state that "the primary message must be energy efficiency, cost savings and comfort." (*Id.* at R-2).

The Commission's rules on promotional allowances promulgated in 1992 clearly allow and contemplate joint advertising if the purpose of the advertising is to promote the public interest, conservation, or energy efficiency. The EEH and QGC programs meet those requirements for approval under the rules and based on the record received here, appear designed to promote conservation and energy efficiency. It is true that the programs also promote load growth but the primary purpose of the program is to increase energy efficiency. For over five years, Virginia gas utilities have struggled to offer joint advertising programs to encourage conservation and energy efficiency that will satisfy the Commission's rules. I believe that VNG has offered sufficient evidence to show that its EEH and QGC programs promote energy efficiency; however, if the Commission disagrees, I recommend that the Commission define the showing necessary for recovery.

Although I find VNG carried its burden to show the EEH and QGC programs are designed to achieve energy conservation and improved energy efficiency, the Commission's rules also require prior approval of the programs before any costs are eligible for recovery. Specifically Rule III.B. provides that "[p]romotional allowance programs designed to achieve energy conservation, . . . or improved energy efficiency are permitted. . . subject to the prior approval of the Commission." (emphasis added). There is no evidence that VNG received prior Commission approval. As a consequence, the joint advertising costs at issue must still be disallowed.

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<sup>8</sup>CLM Order, 1992 S.C.C. Ann. Rep. 261, Rules Governing Utility Promotional Allowances, Rule I.

## 2. *Expenses for Appliance Related Service Calls*

Staff recommended disallowance of \$146,738 of direct labor expenses for certain service calls because Staff considered the calls to be related to merchandising and jobbing and not to customer service. Specifically, Staff witness Miller proposes to eliminate certain payroll expenses related to labor for calls to customers' premises due to problems reported for gas appliances. She also excluded costs for labor relating to converting appliances from propane to natural gas. She asserts that the service could have been performed by a third party and thus should not be recovered through rates. (Ex. LCM-23, at 2).

VNG witness Corbett testified in rebuttal that the calls were not related to merchandising and jobbing and further, that the Company is not engaged in merchandising and jobbing at all. VNG asserts that its response to appliance related calls is based on its obligation to provide safe and reliable service to its customers. Mr. Corbett testified that:

[t]he basis on which a service person is dispatched to a customer's home is that the customer calls VNG and informs us that he has a gas appliance that is not working properly. Our response is predicated on the belief that a gas appliance that is not working properly can represent a potential safety risk requiring immediate action. It is impossible to diagnose the nature of an appliance problem over the telephone. Sometimes problems encountered by our service persons are serious and represent a safety risk that can require immediate action, and sometimes the problem is small and can be resolved with a minor adjustment. In all cases the true nature of the problem, be it serious or minor, cannot be determined without a visit to the customer's location.

(Ex. FJC-31, at 2-3). Mr. Corbett went on to explain that once the service person identifies the problem, there are several courses of action. If the appliance requires major work, the customer is referred to an outside contractor. In the test year 1,562 trouble calls, or 10% of all appliance related calls, resulted in customers being referred to third party contractors. (*Id.* at 3-4). If an unsafe condition posing a risk to the health and welfare of the resident exists, the VNG service person will "red tag" the appliance with a warning tag that states that the appliance should not be used until repaired. The service person also typically shuts off the gas to the affected appliance. If the problem can be remedied with a minor repair, however, the service person does the repair while he is there to prevent a minor problem from turning into a major safety problem. Typically, those minor repairs consist of relighting the pilot light or cleaning debris from the burner. (*Id.* at 3). Although requiring only minor repairs, contaminates blocking the proper amount of air mixed with the natural gas can create serious carbon monoxide problems. (*Id.* at 4). Moreover, Mr. Corbett testified that the majority of the cost associated with these calls is incurred in traveling to the customer's premises and diagnosing the problem.

Also at issue are labor costs associated with the service provided to convert customers' appliances from propane to natural gas. Mr. Corbett explained that such conversions are performed

only for VNG customers who need service before gas lines are extended to their homes and thus are temporarily served on propane supplied by VNG. (Tr. 288). Mr. Corbett also testified that the volume of this work is small. Only 58 appliance conversions were made during approximately 15,000 service calls in 1996. He noted that the customer was responsible for providing the conversion kit and VNG personnel installed it to assure that the converted appliance was functioning safely. (Ex. FJC-31, at 4). He also observed that VNG service personnel are required to go to a customer's home to connect the natural gas after the conversion kit is installed. If VNG does not both install the conversion kit and connect the gas, the customer would have to coordinate an independent contractor's installation of the conversion kit with VNG's service call before the gas appliances in the home can again be operational. (Tr. 288-289).

VNG sells no appliances and thus has no merchandising and jobbing activities. The service calls at issue are proper responses to customer concerns over safety issues. It is clear that the customers' interests are best served by the Company's practice of responding to such problems. It is unreasonable to expect the Company to attempt to diagnose gas leaks over the phone. If a customer calls and has a problem, the best course of action is to promptly dispatch a service person to diagnose the problem and protect the safety of the customer. The principal focus of the service call is on safety, not merchandising and jobbing. The record also is clear that customers appropriately are referred to outside contractors for anything more than minor repairs. Prompt treatment of minor problems is efficient and cost-effective. VNG's practice is proper and the costs should be allowed. The Company should not be penalized for being responsive to the customers' need for safety.

Although Staff asserts that the costs should not be recovered, Staff also suggested that if the Commission allows the Company to recover these costs, it require the Company to develop and file a special service tariff to recover the cost of materials, labor and overhead for such jobbing services in its next rate case. I, however, believe such tariff provisions are unnecessary. The Company currently provides no jobbing and merchandising services. The service calls at issue here are Company responses to safety calls from customers. The costs associated with the calls should be recovered, and no additional tariff provisions are necessary.

### *3. Medical, Dental, and Life Insurance Benefits Expenses*

The Company included actual costs of medical, dental, life insurance and long-term disability insurance for employees for the first six months of 1996 and escalated those costs by 5% to estimate the costs for the second six months of 1996, in its costs of service. (Ex. RDP-8, at 3). Staff received the actual data for the second six months, and annualized that last six months of expense to calculate the expense Staff proposed to include in rates. (Tr. 177; Ex. LCM-23, at 3). Staff would allow recovery of \$1,574,290 of benefits expense, an amount significantly lower than the expenses included in the application. Staff argued that the actual data show a downward trend in the benefits expense and thus annualizing the last six months in the test period, which captures the downward trend, is a better basis for setting rates on a going-forward basis. Staff witness Miller argues that the calendar year 1996 is not representative of future costs and overstates the expense. (Ex. LCM-23, at 3).

As an alternative, Staff proposes to use the most recent eight months of July 1996 through February 1997. (*Id.*). That alternative reduces the Company's expense by \$414,963. (*Id.*).

The Company objects and argues that the proper adjustment should be based on twelve months of actual data. (Ex. RDP-8, at 4). Company witness Robert Phillips asserts that Staff's adjustment double counts the benefits expenses recorded in July and August 1996 which were lower than any other two months during the preceding nineteen month period. Specifically, the total costs in July 1996, were \$86,057 and in August 1996, they were \$88,354. (Ex. RDP-8, Att. R-3). Attachment B to this report is the schedule attached to Mr. Phillips' rebuttal testimony which shows those actual system benefits expenses and the expense levels from August 1995 through February 1997.

The Company asserts that Staff's trend analysis is flawed since its starting point includes a month, June 1996, which stood out as an extraordinarily high month. Benefits costs in that month were \$614,462. It asserts that if the trend analysis is begun at a different point, such as comparing the 12-month rolling average at the beginning of the test period with the average at the end of the period, or the rolling averages at the end of 1995 and the end of 1996, the resulting trend would be upward. (VNG Brief at 11).

Mr. Phillips argues that twelve months of actual data is more representative of both current and future benefits expense levels. The Company proposes to include \$1,937,785 in expense based on actual 1996 jurisdictional costs. (Ex. RDP-8, at 3). Mr. Phillips observes that the number of employees at the end of 1996 was higher than at the beginning of the year, increasing from 559 in January 1996 to 578 in December of 1996. Moreover, the Company argues that use of twelve months of actual data here would be consistent with the Staff practice of using the updated actual twelve months of data for most other expenses.

Upon review of the actual costs, I can find no clear trend. Staff's trend analysis includes two notably low months, the effect of which is compounded by annualizing six or even eight months. The Company's analysis includes two months with very high levels of medical expense, March and June of 1996. (Ex. RDP-8, Att. R-3; Att. B hereto). Without a clear trend or specific occurrence to support a different approach, I find this adjustment should be calculated in a manner consistent with most other expenses. Hence, twelve months of actual data for the calendar year 1996 should serve as the basis for calculating the benefits expense.

#### *4. CNG Service Company Expense*

The AG witness Effron also proposes an adjustment to lower the Company's CNG Service Company charges. The Company proposes to include \$4,052,000 of such charges in its cost of service. (Application, Schedule 17, at 41). To derive that amount, the Company annualized the charges for the months of January 1996 through June 1996. Mr. Effron asserts that method results in an overcharge. (Ex. DJE-17, at 23). Mr. Effron, upon reviewing Company interrogatories, determined that the computer services and departmental service charges for the second half of the year were \$472,000 less than in the first half of 1996. The Company explained that the difference was largely due to processing customer refunds as a result of decisions on rate cases. (*Id.* at 24).

Mr. Effron notes that the Company's approach not only treats the higher customer billing expense as a normal ongoing expense by building it into rates, but compounds the problem by annualizing the effect. Mr. Effron recommends that the actual expenses for the second half of 1996 should be used as the basis for calculating the annual level of charges. (Id. at 26). At the hearing, Mr. Effron generally stated that a number of issues which he had addressed were also addressed by Staff, and further that the Company had agreed to a number of those Staff adjustments so they were not still in contention. (Tr. 125-126). It is not clear if the AG still takes issue with the expenses associated with computer services. There was no mention of the issue in the AG's brief or in Mr. Effron's additional testimony at the hearing. (Tr. 126-134).

Staff, however, also addressed computer services. Ms. Miller initially proposed to eliminate from expense, and instead, to capitalize and amortize over five years, \$140,100 of network computer services and \$92,440 for information technology services. (Ex. LCM-22, at 16). In supplemental testimony, Ms. Miller testified that the Company had provided additional information explaining the functions of the Information Technology Department and the services at issue, specifically. She agreed that the charges were current expenses for day-to-day services which should be included in cost of service. Staff therefore included the updated 1996 charges as expenses in the cost of service calculation in her supplemental testimony. (Ex. LCM-23, at 4). Staff's revised adjustment is reasonable and should be adopted.

The AG does continue to take issue with certain expenses which he classified as lobbying expenses. Mr. Effron recommends that charges for the External Affairs and Policy Development Department be eliminated. (Ex. DJE-17, at 27). He testified that, in his opinion, the Company's own description of the functions of the department sounded like lobbying. Specifically, the Company stated that the department "facilitates the achievement of CNG's corporate objectives through maintenance of effective communications with Congress and other legislative and certain administrative bodies." (Id.).

Company witness Hunter testified in rebuttal that only a small part of the activities of the External Affairs and Policy Department were for lobbying, although he acknowledged that lobbying costs should be removed from the cost of service. (Ex. WRH-6, at 4). Mr. Hunter provided a breakdown of test year expenses for the department and noted that only \$11,607 was attributable to System lobbying. (Id. at 5). He also testified that much of the work of the department related to keeping VNG and other operating companies informed of developments affecting operations, notably restructuring of the industry, among other issues. (Id.).

Staff agreed that only the actual level of direct lobbying expenses should be removed, and in supplemental testimony adjusted the updated 1996 charges to exclude the same percentage of lobbying expense. Staff thus removed \$11,234 from the CNG Service Company expense. (Ex. LCM-23, at 5). The AG asserts that the Company has not carried its burden to justify the challenged expenses because it has failed to provide sufficient detail to warrant inclusion. (AG Brief at 12).

Mr. Hunter, however, adequately identifies the breakdown of the activities and expenses of the External Affairs and Policy Department. Mr. Hunter provided the following:

<u>ACTIVITY</u>	<u>AMOUNT</u>
Shareholder's Services Annual & Interim Reports	\$ 390
PUHCA Activities	\$ 1,563
System Lobbying Activities	\$11,607
Gov. Affairs Management Activities	\$17,421
Issues Analysis/Communications/Update	\$56,687
Other System Activities	\$ 1,196
Department Administration	<u>\$ 33</u>
<b>TOTAL</b>	<u><b>\$88,897</b></u>

Although the AG continues to assert that “Issues Analysis/Communications/Update” appears to encompass lobbying activities, it is the only category which captures the department's activities required to inform VNG and all CNG operating companies of legislative and regulatory matters which may affect operations. At a time when the energy industry is undergoing major restructuring, that information is critical. Such communications, of course, are much different than direct lobbying activities. I find that the Company has carried its burden to identify the expenses which are recoverable and only those direct system lobbying expenses must be removed.

5. *Rate Base - Compensatory Bank Balances*

In determining its cash working capital allowance, the Company included an amount for bank compensatory balances. The Company provided a balance sheet analysis of additional uses and sources of cash that were then used to determine the total Cash Working Capital ("CWC") requirement. The analysis showed \$597,000 in bank compensatory balances which increased the CWC allowance by the same amount. That balance was calculated from a thirteen month average of the sum of the average daily balances for all VNG bank accounts as reported on monthly bank statements.

Mr. Effron asserts that CWC should not include an amount for bank compensatory balances based on bank statements. (Ex. DJE-17, at 7). He testified that in the lead-lag study, the lag in the payment of expenses is measured from the time the expense is incurred to the time the funds are disbursed, not to the time that the payment clears the bank account. (*Id.*). Therefore, Mr. Effron asserts that any cash balance in CWC should reflect the cash balance in the Company's books of accounts, not the cash shown on the bank statement. Based on Company interrogatory responses, Mr. Effron calculated the average cash balance included on the Company's books of accounts for the test year as negative \$577,000. (*Id.*). He notes that the Company's cash management practices allow it to meet its compensatory balance requirements even while showing a negative cash balance on its books. (*Id.* at 8). Use of the average cash balance on the Company's books of accounts, rather than on the bank statements, would reduce the jurisdictional rate base by \$1,118,000. (*Id.* at 9, and Schedule B-2).

The Company criticizes Mr. Effron's calculation because he uses end of month balances, not daily cash balance amounts as is shown on the bank statements. (Ex. RDP-8, at 10). On brief, VNG argues that the compensating bank balance calculation is not part of the lead-lag study which is

related to the income statement, but rather, part of a balance sheet analysis which deals with items that do not flow through the income statement. Mr. Phillips also asserts that Mr. Effron's adjustment should be rejected because it is a negative amount. The Company observes that its bank account is not overdrawn. (Tr. 88). It urges the Commission to determine bank balances on the basis of bank statements which reflect day-to-day activities.

Staff's calculation is also based on the bank statement balances and results in a \$149,392 cash balance to include in the cost of service. (Ex. LCM-22, App. A, at 30). Staff's use of daily balances is more precise and is consistent with the analysis approved by the Commission in a prior Company case.<sup>9</sup> VNG agreed to accept Staff's amount. (Ex. RDP-8, at 9-10). I agree with Staff's adjustment. It is consistent with the method the Commission has used to calculate compensatory balances in past cases; it is a more precise method, and should continue to be used here.

#### 6. *Cost of Equity Capital*

Three witnesses testified on VNG's cost of equity. All three recognized that no single method should be used since each approach has its strengths and deficiencies. Each witness therefore conducted several analyses and then applied his informed judgment to offer a recommendation in this case. Staff witness Maddox used a discounted cash flow ("DCF") analysis and several risk premium analyses, including a capital asset pricing model, to calculate his recommendations for a reasonable return on equity for the Company. (Ex. FMM-25, at 2). He used two proxy groups of average risk gas distribution utilities, the first with at least 90% of revenues from gas distribution and the second smaller group of five companies selected based on defined screening criteria. (Ex. FMM-25, at 2, 13-14). Mr. Maddox updated his market data through March 1997 and in supplemental testimony recommended a cost of equity range of 10.4% to 11.4%. (Ex. FMM-26, at 1).

All cost of capital witnesses relied on the capital structure for Consolidated Natural Gas Company ("CNG"), which wholly owns VNG. As in past cases, Staff included a financial risk adjustment to account for a higher equity ratio in the CNG capital structure than was found in the proxy companies. (Ex. FMM-25, at 23). Staff proposed an adjustment of 30 basis points. An adjustment of 40 points was approved by the Commission in the last case. Staff's adjustment was lower in this case because the difference between the equity ratio of CNG and that of the proxy group was smaller. (*Id.* at 24).

AG witness Hill also filed testimony on the Company's cost of equity. In making his recommendation, Mr. Hill considered DCF, modified earnings to price ratio, market to book ratio, and CAPM analyses. Mr. Hill recommended a cost of equity in the range of 10.25% to 10.75%. (Ex. SGH-18, at 3). For ratemaking purposes, he recommends use of the lower end of his range, or 10.25%. Mr. Hill would use the lower end of his range to account for financial risk differences between the capital structure of his proxy group (approximately 48% equity) and the CNG capital structure which included approximately 58% equity. (*Id.*).

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<sup>9</sup>*Application of Virginia Natural Gas*, Case No. PUE900028, 1991 S.C.C. Ann. Rep. 292.



The Company supports retaining the previously approved rate of return on equity of 11.3%. (Ex. CFP-10, at 20-21). Company witness Phillips relies on a modified DCF approach, risk premium and CAPM analyses. (*Id.*). He also acknowledges that a financial risk adjustment may be appropriate to recognize the difference in equity ratios between the proxy groups and CNG. (Ex. CFP-11, at 22). He, however, recommends an upward adjustment to the cost of debt if any adjustment must be made.

#### *A. Modified DCF Approach*

Although each witness conducted several analyses to justify his recommendations, both Staff and the AG were particularly critical of the Company's use of a modified DCF model. Dr. Phillips testified that a modified model was necessary because of the "inherent problems with the traditional DCF analysis." (Ex. CFP-10, at 12). He asserts that the DCF model does not accurately estimate cost of equity when book value is different than market value. (*Id.*). Specifically, he argues that the traditional model understates the required return on equity when market prices are above book value. Therefore, his modified approach substitutes book value for the market price in determining the yield component of the DCF analysis. (Ex. CFP-10, at 13-17). His traditional DCF approach produced an average equity cost of 8.74% while his modified DCF approach produced over a 300 basis point increase to an average equity cost of 11.89%. Although continuing to recommend a rate of 11.3%, Dr. Phillips updated his DCF calculations at the hearing to an average of 9.39% for his traditional DCF analysis and 13.17% for his modified analysis. (Tr. 93).

The AG witness, Mr. Hill, argues that the traditional model is intended to estimate market price. Investors purchase stock at the market price, thus the market price in the DCF analysis "represents the current assessment of the value of the future stream of income afforded the owner of the security." (Ex. SGH-18, at 50-51). Similarly, Staff witness Maddox argues that the modified approach is not appropriate. He testified that the DCF model does not assume, as does Dr. Phillips, that market value is equal to book value. (Tr. 143, 210; Ex. FMM-25, at 26). Mr. Maddox notes that the utility's market value of equity is forward looking. Book value, on the other hand, is the historic sum of retained earnings and common stock sales and purchases since the inception of the Company. (Ex. FMM-25, Appendix C at 388).

Dr. Phillips testified that other regulatory commissions are abandoning the traditional DCF model. (Tr. 109). Yet, both Staff and the AG cite numerous regulatory commissions which continue to use a traditional analysis; and notably, the Indiana and Illinois commissions rejected Dr. Phillips' modified approach in favor of the traditional analysis. (Tr. 144, 147; Ex. SGH-18, at 55).

In Virginia, the Commission has recognized that no one analysis yields the perfect rate of return on equity, but the traditional DCF analysis has long been part of the financial considerations which support a reasonable determination of a utility's cost of equity. The DCF traditional analysis is prefaced on the well-founded belief that the market price is the investors' assessment of what the future discounted value of earnings will be. As Staff and the AG emphasize, investors must decide whether to pay the market price for the company's stock, they cannot pay book value. Dr. Phillips' arguments do not support his modification of the traditional DCF analysis in this case.

### *B. Financial Risk Adjustment*

Staff proposed a downward adjustment of 30 basis points to VNG's equity range to recognize that CNG's consolidated equity ratio is higher than that of his proxy group of average gas distribution companies. (Ex. FMM-25, at 21-23).

The Commission approved a similar adjustment in a prior VNG case.<sup>10</sup> In that case, the Commission approved a 50 basis point reduction in the equity range that would have been appropriate for a more typical gas company with an equity ratio near 46%. (*Id.*). At that time the differential between the Company and the comparable group of companies was 14% considering short-term debt or 16% excluding short-term debt. In the Company's last case the Commission approved a 40 basis point downward adjustment to recognize a higher than average equity ratio in the consolidated capital structure of CNG.<sup>11</sup>

The Commission has also approved upward adjustments to recognize the financial risk associated with an equity ratio less than that of an average gas distribution company.<sup>12</sup> The Commission thus has adjusted for the impact of capitalization ratios that vary significantly from the average company.

Staff witness Maddox testified that "[f]inancial risk is defined as the additional risk placed on shareholders as a result of the firm's use of debt. Debt magnifies the variability of earnings which by definition is increased risk." (Ex. FMM-24, at 23). He further testified that financial risk increases with increased use of debt noting that the Commission has established the size of any adjustment based on the difference between the debt component in the capital structure of the applicant and the debt component for a proxy group. He testified that CNG's consolidated capital structure reflects less debt than his proxy group and thus the higher leveraged, higher risk of the equity estimate flowing from the proxy group must be adjusted downward. (*Id.*).

One study considered by Staff determined that the cost of equity changed on average 7 basis points for each percentage point change in the common equity ratio.<sup>13</sup> Staff generally found a difference in equity ratios of 9-13% over the four quarters ending September 1996. The study would thus indicate a reduction in the cost of equity of 63 to 91 basis points. Staff, however, recommends only a 30 basis point reduction. Staff recommends a lower financial risk adjustment in this case than

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<sup>10</sup>*Application of Virginia Natural Gas, Inc., For a general increase in rates*, Case No. PUE900028, 1991 S.C.C. Ann. Rep. 292, 294.

<sup>11</sup>*Application of Virginia Natural Gas, Inc., For an expedited increase in gas rates*, Case No. PUE940054, 1996 S.C.C. Ann. Rep. 252.

<sup>12</sup>*Application of Roanoke Gas Company, To revise its tariffs in an expedited proceeding*, Case No. PUE890055, 1990 S.C.C. Ann. Rep. 291, 293 .

<sup>13</sup>Brigham, Gapenski, and Aberwald, Capital Structure, Cost of Capital, and Revenue Requirements, Public Utility Fortnightly (January 8, 1987).

in the last due to a lower equity ratio differential and a higher spread between double A and single A bonds. (Id.).

Mr. Hill, on behalf of the AG, effectively recommended a 25 basis point decrement to his cost of equity. He recommended a cost of equity 25 points below the midpoint of his recommended range. (Ex. SGH-18, at 3; Tr. 159). He testified that his 25 point adjustment was conservative and that a significantly higher adjustment could easily be justified. (Ex. SGH-18, at 45; Tr. 140).

Company witness Causey argued that no adjustment should be made. He asserts that such a financial risk adjustment serves only as a penalty, prevents VNG from recovering its cost of capital, and discourages investment in the Company. (Ex. JLC-4, at 9). Yet, Company witness Phillips admits that companies with higher debt ratios tend to have greater financial risks than companies with lower debt ratios. (Tr. 98-99, 114-115). I find that Staff's 30 basis point adjustment is supported by the record, is consistent with precedent, and should be made.

Dr. Phillips also argues that if the cost of equity is adjusted for a risk differential, the cost of debt should also be adjusted. Mr. Maddox counters that the cost of debt he uses already reflects the appropriate cost rate. (Tr. 215). Mr. Maddox testified that only his equity rate needs to be adjusted since it was derived from a proxy group of companies that are more highly leveraged. (Id.). Thus, the financial risk adjustments applied by Mr. Maddox and Mr. Hill were applied to the cost of equity estimate from their proxy groups to estimate what the capital costs would be for the proxy group if those companies were less leveraged. (Tr. 216). Mr. Maddox and Mr. Hill properly found the equity costs would be lower. CNG's actual cost of debt, however, is known and should not be adjusted.

7. *Revenue Requirement*

Based on my resolution of the issues discussed above and my acceptance of the other accounting and cost of capital issues that were not in dispute, VNG's additional revenue requirement is \$7,241,782, as calculated below:

**Virginia Natural Gas, Inc.  
Revenue Requirement per Hearing Examiner**

Adjusted Net Operating Income per Miller Statement II (Exhibit LCM-23)	\$ 19,530,782
To add labor costs associated with service calls	(195,267)
To adjust benefits expense to include 12 months ending 12-31-96 of actual data	(334,174)
To reflect FIT effect of changes	185,723
<b>Adjusted Operating Income per Examiner</b>	<b>\$ 19,187,065</b>
Rate Base per Miller Statement II (Exhibit LCM-23)	\$ 257,048,646
To adjust for change in CWC amount affected by employee benefits adjustment	\$ 37,350
<b>Rate Base per Hearing Examiner</b>	<b>\$ 257,085,996</b>
Overall cost of capital with 10.90% ROE	9.24%
Adjusted Operating Income Required	\$ 23,759,888
Adjusted Operating Income per Examiner	\$ 19,187,065
Net Required	\$ 4,572,823
Revenue Conversion Factor	.63145
<b>Gross Revenue Requirement per Examiner</b>	<b>\$ 7,241,782</b>

8. *Revenue Apportionment*

The Company filed this case as an expedited application for rate relief. In accordance with the Commission's rules, VNG did not propose any rate design or revenue apportionment changes from its last case. Staff, however, made several revenue apportionment recommendations which Staff witness Frassetta testified would consider the impact of the revenue increase on all customers, maintain a movement to parity and are consistent with the Commission's policy regarding revenue

apportionment. (Ex. GGF-28, at 10). The Industrial Protestants oppose Ms. Frassetta's recommendations as they relate to Schedule 7. Her proposal, they assert, would move Schedule 7 further away from parity. (Tr. 30).

VNG performed a fully allocated class cost of service study. Staff used essentially the same methodology as the Company with only two changes which are not disputed in this case. The effect of these changes is negligible. (Ex. GGF-28, at 6). Staff also addressed the capacity costs associated with transportation banking and balancing storage costs and allocated an appropriate amount to the transportation class. (Id.).

Staff compared the returns by rate schedule to determine class movements toward parity with the system return. (Id. at 7). Ms. Frassetta testified that the revenue apportionment proposed by the Company resulted in a positive movement towards parity for twelve out of fourteen classes (Id.), but she noted that Schedules 1 and 2 showed movement away from parity. (Tr. 228). Staff therefore proposed an alternative apportionment. Staff did not adjust the revenue requirement upward for the revised target margin for Schedules 8 and 9. Staff thus was also faced with approximately an additional \$794,000 which had to be apportioned. Ms. Frassetta allocated the bulk of the increase to the firm rate classes, Schedules 1, 2, 3, 4, 5, 6 and 7. She then attempted to ensure that no class moved significantly away from parity, adjusting the additional revenue by rate schedule where necessary. (Ex. GGF-28, at 10). Ms. Frassetta compared her proposed allocation to the Company's as follows:

#### REVENUE ALLOCATION COMPARISON

RATE SCHEDULE	PRESENT REVENUES	COMPANY PROPOSED ADD'L REV	% INCREASE COMPANY PROPOSED	STAFF PROPOSED ADD'L REV	% INCREASE STAFF PROPOSED
1	\$114,795,225	\$10,050,731	8.76%	\$10,763,578	9.38%
2	\$39,491,570	\$2,827,105	7.16%	\$2,630,000	6.66%
3	\$9,850	\$1,282	13.02%	\$3,621	36.76%
4	\$9,574	\$1,535	16.03%	\$2,181	22.78%
5	\$13,182	\$2,777	21.07%	\$4,782	36.28%
6	\$1,872,014	\$94,237	5.03%	\$161,734	8.64%
7	\$1,664,126	\$109,009	6.55%	\$309,140	18.58%
8	\$809,041	\$0	0.00%	\$0	0.00%
9A	\$922,039	\$18,315	1.99%	\$19,459	2.11%
9B	\$1,761,537	\$0	0.00%	\$0	0.00%
9C	\$1,066,221	\$0	0.00%	\$0	0.00%
11	\$21,365	\$0	0.00%	\$3,976	18.61%
12	\$1,722	\$0	0.00%	\$620	36.00%
Misc Rev	\$1,801,886	\$0	0.00%		
Target Margin		\$794,101		\$0	
<b>TOTAL</b>	<b>\$164,239,352</b>	<b>\$13,899,092</b>		<b>\$13,899,091</b>	

(Ex. GGF-28, Att. 2; Tr. 223). As can be seen above, Staff still recommended that most of the additional revenue be apportioned to Rate Schedules 1 and 2, and VNG agreed with Staff's recommendations. (Tr. 122-123).

The Industrial Protestants urge the Commission to reject the Staff's proposed revenue apportionment which they assert arbitrarily assigns proportionately more of the requested increase to Rate Schedule 7, a customer class that currently provides returns that are twice that of the system average. They recommend that the Commission utilize the revenue apportionment percentages approved in the last general rate case.<sup>14</sup> (Industrial Protestants' Brief at 1).

The Industrial Protestants accurately assert that the percentage return produced by the Schedule 7 rates moves from 13.16% to 20.92% as a result of Staff's revenue apportionment recommendation. The following shows the impact of Staff's revenue allocation:

#### STAFF'S STUDY

	PRESENT RETURN	PRESENT INDEX	PROPOSED RETURN	PROPOSED INDEX	PROPOSED MOVEMENT
SCHEDULE 1	5.64%	90.53	9.03%	92.62	22.07%
SCHEDULE 2	7.93%	127.29	12.41%	127.28	0.04%
SCHEDULE 3	0.63%	10.11	9.74%	99.90	99.89%
SCHEDULE 4	1.05%	16.85	9.75%	100.00	100.00%
SCHEDULE 5	-2.42%	-38.84	2.12%	21.74	43.63%
SCHEDULE 6	10.80%	173.35	16.91%	173.44	-0.12%
SCHEDULE 7	13.16%	211.24	20.92%	214.56	-2.98%
SCHEDULE 8	46.30%	743.18	47.95%	491.79	39.09%
SCHEDULE 9A	10.43%	167.42	11.42%	117.13	74.59%
SCHEDULE 9B	8.15%	130.82	7.69%	78.87	168.56%
SCHEDULE 9C	13.19%	211.72	12.92%	132.51	70.90%
SCHEDULE 9D	-0.09%	-1.44	-0.92%	-9.44	-7.89%
SCHEDULE 11	-83.36%	-1338.04	-83.59%	-857.33	33.43%
SCHEDULE 12	-3.55%	-56.98	11.38%	116.72	110.65%
VIRGINIA JURISDICTIONAL	6.23%		9.75%		

(Ex. GGF-28, Att. 3). Ms. Frassetta admits that her recommendation would move Schedule 7 away from parity but counters that the movement is not significant, especially considering the imprecise nature of cost of service studies in measuring class rate of returns. (Tr. 228). I am concerned with the movement away from parity resulting from Staff's proposal; however, on balance I must agree with Staff's recommendations. The Commission has repeatedly found that cost of service studies present only estimates of cost of service and stressed the importance of rate stability. Staff already applied the bulk of the revenue increase to Schedules 1 and 2 which moves those classes much closer

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<sup>14</sup> *Application of Virginia Natural Gas, Inc.*, Case No. PUE920031, 1993 S.C.C. Ann. Rep. 256, 259, App. A.

towards parity. Schedule 1 rates move 22.07% from 5.64% to 9.03%. That represents a significant movement towards the system return of 9.75%.

The studies and revenue apportionment comparisons that were presented in this case, however, were based on the Company's initial request for an increase of \$13,899,092. The Company represented that it generally applied the Staff's revenue apportionment recommendations to the decrease in interim rates implemented in October, 1997. The rates now in effect on an interim basis are designed to recover an additional \$8,818,320 in annual revenue. In applying Staff's apportionment of that lower interim increase, the Company reduced interim rates for Schedules 1, 2, and 9A. Staff's apportionment would have resulted in an interim increase to Schedules 3, 4, 5, 6, 7, 9B and C, 11 and 12, so VNG did not change those rates in October from the levels already in effect. The revenue requirement that I recommend herein is even lower than the level implemented in October. In the interest of further rate stability and mitigating the impact on Rate Schedule 7, I recommend that any revenue reduction below the level implemented in October be first applied to Schedules 3, 4, 5, 6, 7, 9B and C, 11 and 12 to prevent any rates from being increased above interim levels. Schedule 7 customers, in particular, thus would avoid any additional increase in rates which would move them further away from parity with the system return. The remainder of any further reduction should be applied on a pro rata basis as recommended by Ms. Frassetta.

## **FINDINGS AND RECOMMENDATIONS**

In conclusion, based on the evidence received in this case, and for the reasons set forth above, I find that:

1. The use of a test year ending June 30, 1996, is proper in this proceeding;
2. The Company's test year operating revenues, after all adjustments, were \$164,521,865;
3. The Company's test year operating deductions, after all adjustments, were \$144,606,092;
4. The Company's test year operating income and adjusted operating income, after all adjustments, were \$19,915,773 and \$19,187,065, respectively;
5. The Company's adjusted test period rate base, updated to December 31, 1996, is \$257,085,996;
6. The Company's current rates produced a return on adjusted rate base of 7.46% and a return on equity of 7.66%;
7. The Company's cost of equity is within a range of 10.40% to 11.40%, and rates should be established at the midpoint of that range, 10.90%;
8. The Company's overall cost of capital is 9.24%;

9. The Company's current rates are unjust and unreasonable because they will generate a return on rate base less than 9.24%;

10. The Company requires an increase in gross annual revenues of \$7,241,782 to earn a 9.24% return on rate base;

11. The Company should file permanent rates designed to produce the additional revenues found reasonable herein effective October 25, 1996, to be consistent with Staff's revenue apportionment as modified herein;

12. The Company should file revised tariff sheets to incorporate Staff witness Frassetta's recommended changes;

13. The Company should be required to refund, with interest, all revenues collected under interim rates in excess of the amount found just and reasonable herein; and

14. VNG should incorporate Staff's recommendations in the cost of service study presented in the next rate case.

In accordance with the above findings, ***I RECOMMEND*** that the Commission enter an order that:

1. ***ADOPTS*** the findings in this Report;
2. ***INCREASES*** the Company's authorized gross annual revenues by \$7,241,782; and
3. ***DIRECTS*** the refund with interest of all amounts collected under the interim rates in excess of the rate level found just and reasonable herein.

## **COMMENTS**

The parties are advised that any comments (Section 12.1-31 of the Code of Virginia and Commission Rule 5:16(e)) to this Report must be filed with the Clerk of the Commission in writing, in an original and fifteen (15) copies, within fifteen (15) days from the date hereof. The mailing address to which any such filing must be sent is Document Control Center, P. O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been mailed or delivered to all other counsel of record and to any party not represented by counsel.

Respectfully submitted,

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Deborah V. Ellenberg  
Chief Hearing Examiner